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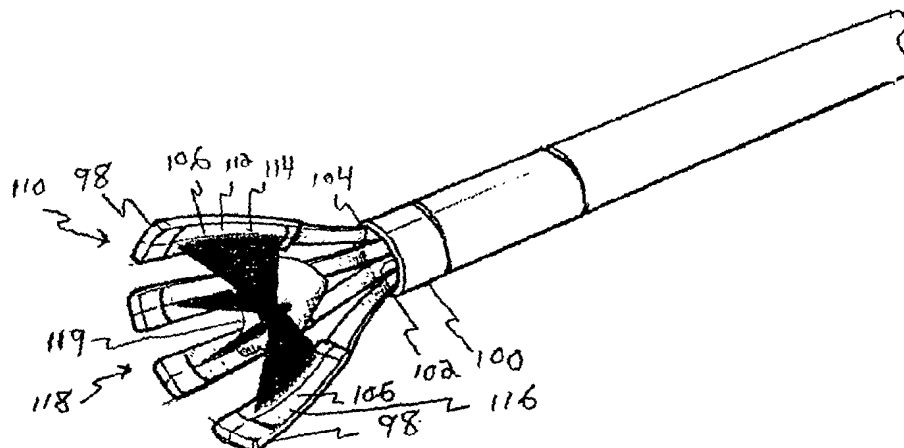
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(54) Title: DEPLOYABLE ULTRASOUND MEDICAL TRANSDUCERS



(57) Abstract: An ultrasound medical system (94) includes a tube (96) and resiliently flexible fingers (98). The tube (96) has a distal end insertable into a patient and has a lumen (102) with a distal opening (104). The fingers (98) are extendable out of the distal opening (104) of the lumen (102) creating a deployed state and are at-least-partially retractable into the distal opening of the lumen creating a stowed state. Each finger includes an ultrasound transducer (106), wherein the distance between the transducers of adjacent fingers is greater in the deployed state than in the stowed state. In one example, at least one of the transducers is an ultrasound imaging transducer, an ultrasound medical-treatment transducer, or an ultrasound imaging and medical treatment transducer.



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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/16689

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61B 8/14

US CL : 600/466

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 600/407-471; 604/ 10, 19, 22, 41, 96, 113, 114, 500; 606/27-32, 35, 38, 41, 159, 167, 170, 171; 607/122

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,699,805 A (Seward et al.) 23 December 1997 (23.12.1997), the entire document.	1-20
A	US 6,193,709 B1 (Miyawaki et al.) 27 February 2001, (27.02.2001), the entire document.	1-20

<input type="checkbox"/> Further documents are listed in the continuation of Box C.	<input type="checkbox"/> See patent family annex.
* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

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Continuation of B. FIELDS SEARCHED Item 3:

EAST 1.3, NPL

search terms: ultrasound, catheter, therapy, transducer, lumen or tube, resilient